IN THE CLAIMS

Please amend the claims as follows:

1. (original) A display device (101) for displaying a three dimensional image such that different views are displayed according to the viewing angle, the display device including:

a display panel (15, 53) having a plurality of separately addressable pixels (0...10) for displaying said image, the pixels being grouped such that different pixels in a group (16) correspond to different views of the image, each pixel in a group being positioned relative to a respective discrete light source (14);

a display driver (52) for controlling an optical characteristic of each pixel to generate an image according to received image data; and

an intensity compensation device (60, 70) for further controlling said optical characteristic of pixels within a group to compensate for an angular size of view, of the respective light source, via said pixels.

2. (original) The display device of claim 1 further including a back panel (11) for providing a plurality of said discrete light sources (14), each group (16) of pixels in the display panel (15)

being positioned to receive light from a respective one of the discrete light sources.

3. (original) The display device of claim 2 in which the back panel (11) provides a plurality of line sources of illumination.

4. (original) The display device of claim 2 in which the back panel (11) provides a plurality of point sources of illumination.

5. (original) The display device of claim 2 in which the display panel (15) is a light-transmissive display panel adapted for viewing from a side opposite to the side on which the back panel (11) is located.

6. (original) The display device of claim 1 further including a lenticular array (120) positioned adjacent to the display panel (115), each lenticle (121, 122) within the array focusing light from selected pixels in the display panel.

7. (original) The display device of claim 6 in which each lenticle (121, 122) within the array (120) is associated with a said group (16) of pixels.

8. (currently amended) The display device of ~~any preceding claim~~claim 1 in which the optical characteristic is a light transmission characteristic and the display driver (52) and intensity compensation device (60, 70) are adapted to control the amount of light passing through each pixel according to an image to be displayed.

9. (currently amended) The display device of ~~any preceding claim~~claim 1 in which the intensity compensation device (60) comprises a look-up table containing correction values to be applied in respect of each pixel within a group.

10. (original) The display device of claim 9 in which the correction values are selected so as to substantially normalise an intensity displayed by a group of pixels to be independent of viewing angle.

11. (original) The display device of claim 9 in which the look-up table includes substitution values or offset values as a function of viewing angle to be applied to a frame store.

12. (original) The display device of claim 8 in which the intensity compensation device is adapted to adjust a pixel drive voltage and/or current received from the display driver.

13. (original) The display device of claim 12 in which the intensity compensation device provides a voltage and/or current offset to the pixel drive voltage and/or current received from the display driver.

14. (original) The display device of claim 1 in which the intensity compensation device is adapted to further control said optical characteristic of pixels within a group as a function of a linear viewing angle dimension of each pixel.

15. (original) The display device of claim 1 in which the intensity compensation device is adapted to further control said optical characteristic of pixels within a group as a function of an areal viewing angle dimension of each pixel.

16. (original) The display device of claim 1 in which the intensity compensation device is adapted to further control said optical characteristic of pixels within a group as a function of the angle subtended by a linear dimension of a pixel relative to

its respective discrete light source.

17. (original) The display device of claim 1 in which the intensity compensation device is adapted to further control said optical characteristic of pixels within a group as a function of the angle subtended by an areal dimension of a pixel relative to its respective discrete light source.

18. (original) The display device of claim 1 in which the intensity compensation device is adapted to further control said optical characteristic of pixels within a group to modulate the optical transmissivity of each pixel according to the function:

$$\frac{\arctan\{[(N + 0.5)p_0 + 0.5 * w] / h\} - \arctan\{[(N - 0.5)p_0 - 0.5 * w] / h\}}{\arctan\{[(n + 0.5)p_0 + 0.5 * w] / h\} - \arctan\{[(n - 0.5)p_0 - 0.5 * w] / h\}}$$

where the group of pixels comprises (2N + 1) pixels, n is the pixel position from the centre of the group of (2N + 1) pixels, p_0 is the pixel width, w is the width of the discrete light source, and h is the orthogonal separation of the light source to the plane of the group of pixels.

19. (currently amended) The display device of ~~any preceding claim~~claim 1 in which the inherent optical characteristics of the display panel (15, 53) are configured such that viewing angle dependence is reduced or substantially minimised relative to the y-axis and the intensity compensation device (60, 70) serves to reduce or substantially minimise viewing angle dependence relative to an axis that is transverse to the y-axis.

20. (original) The display device of claim 19 in which the intensity compensation device (60, 70) serves to reduce or substantially minimise viewing angle dependence relative to an axis that is orthogonal to the y-axis (i.e. the x-axis).

21. (original) The display device of claim 20 incorporated into an object, in which the x-axis is defined as the horizontal axis when the object is in normal use, and the y-axis is defined as the vertical axis when the object is in normal use.

22. (original) A method for displaying a three dimensional image on a display device (101) such that different views of the image are displayed according to the viewing angle, the method comprising the steps of:

processing image data to form pixel intensity data values for each one of a plurality of separately addressable pixels (0...10) in display panel (15, 53), the pixels being grouped such that different pixels in a group (16) correspond to different views of the image, and each pixel in a group being positioned relative to a respective discrete light source (14), the pixel intensity data values each for controlling an optical characteristic of a respective pixel to generate the image;
applying intensity correction values to at least some pixel data values within each group to compensate for an angular size of view, of the respective light source, via said pixels; and
using the corrected pixel data values to drive pixels of the display panel to generate said image.

23. (original) The method of claim 22 in which the optical characteristic is a light transmission characteristic and the intensity correction values applied are adapted to control the amount of light from the respective discrete light source passing through each pixel according to a three dimensional image to be displayed.

24. (original) The method of claim 22 in which the intensity correction values are obtained from a look-up table containing

correction values to be applied in respect of each pixel within a group.

25. (original) The method of claim 22 in which the correction values are selected so as to substantially normalise an intensity displayed by a group of pixels to be independent of viewing angle.

26. (original) The method of claim 22 in which the intensity correction values are used to adjust a pixel drive voltage and/or current applied to the display panel.

27. (original) The method of claim 22 in which the intensity correction values are determined according to a function of a linear viewing angle dimension of each pixel in a group.

28. (original) The method of claim 22 in which the intensity correction values are determined according to a function of an areal viewing angle dimension of each pixel in a group.

29. (original) The method of claim 22 in which the intensity correction values are determined according to a function of the angle subtended by a linear dimension of a pixel relative to its respective discrete light source.

30. (original) The method of claim 22 in which the intensity correction values determined according to a function of the angle subtended by an areal dimension of a pixel relative to its respective discrete light source.

31. (original) The method of claim 22 in which the intensity correction values are selected to modulate the optical transmissivity of each pixel according to the function:

$$\frac{\arctan\{[(N + 0.5)p_0 + 0.5 * w] / h\} - \arctan\{[(N - 0.5)p_0 - 0.5 * w] / h\}}{\arctan\{[(n + 0.5)p_0 + 0.5 * w] / h\} - \arctan\{[(n - 0.5)p_0 - 0.5 * w] / h\}}$$

where the group of pixels comprises (2N + 1) pixels, n is the pixel position from the centre of the group of (2N + 1) pixels, p_0 is the pixel width, w is the width of the discrete light source, and h is the orthogonal separation of the light source to the plane of the group of pixels.

32. (currently amended) The method of ~~any one of claims 22 to 31~~claim 22 further including the step of configuring the inherent

optical characteristics of the display panel (15, 53) such that viewing angle dependence is reduced or substantially minimised relative to the y-axis and applying said intensity correction values so as to reduce or substantially minimise viewing angle dependence relative to an axis that is transverse to the y-axis.

33. (original) The method of claim 32 in which the intensity correction values are applied to reduce or substantially minimise viewing angle dependence relative to an axis that is orthogonal to the y-axis (i.e. the x-axis).

34. (original) The method of claim 33 in which the x-axis is the horizontal axis when the display panel is in normal use, and the y-axis is the vertical axis when the display panel is in normal use.

35. (currently amended) A computer program product, comprising a computer readable medium having thereon computer program code means adapted, when said program is loaded onto a computer, to make the computer execute the procedure of ~~any one of claims 22 to 34~~claim 22.

36. (currently amended) A computer program, distributable by electronic data transmission, comprising computer program code

means adapted, when said program is loaded onto a computer, to make the computer execute the procedure of ~~any one of claims 22 to 34~~claim 22.